ARKANSAS DRINKING WATER UPDATE

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RTCR Primacy Application is Awarded Final Approval

Jeff Stone, P.E., Director

The Engineering Section at the Arkansas Department of Health (ADH) has received notice that the Environmental Protection Agency has given final approval for primacy to the ADH for the Revised Total Coliform Rule (RTCR). July 17, 2015 was the effective date of the final approval.

The Engineering Section submitted the primacy application in early 2015. The Engineering Section was granted interim primacy for the RTCR on February 25, 2015. The application package was detailed and contained elements that included how the various requirements would be implemented and also documented the ADH's ability to enforce the various requirements. The final approval of primacy for the RTCR on July 17, 2015 concludes the application process. The drinking water program contact at EPA Region VI indicated that Arkansas was the first state program to receive primacy for the Revised Total Coliform Rule and was only preceded by Puerto Rico, a territory.

One key component of the RTCR requirements regards the performance of a Level 1 and Level 2 Assessments when triggered by positive bacteriological sampling results. The Level I Assessments will be performed by the water system utilizing a pre-prepared form supplied by the ADH. This form was included in the Summer 2015 issue of this newsletter.

Level 2 Assessments will be conducted by ADH staff. The purpose of the assessments is to attempt to identify the cause of total coliform positive samples and any sanitary defects that need to be corrected thus enabling the water system to pursue appropriate corrective action and eliminate sanitary defects.

Currently, the staff of the Engineering Section is working with water systems to become familiar with the requirements of the Level I Assessments so that once the rule becomes effective there will be a familiarity with the assessment process. The ADH is aware that many water systems rarely obtain coliform positive results so there will be an ongoing need for the ADH to assist water systems with the assessments.

The Level I Assessment form that the Arkansas Department of Health is providing to water systems, and published in the Summer 2015 newsletter, guides the water operators to evaluate 8 different aspects of the water systems condition and operation. Those 8 different aspects are summarized as follows.

1) Evaluate sample sites
2) Review sampling protocols
3) Unusual events (pressure loss, treatment upsets, unsanitary conditions, etc.)
4) Recent operational changes
5) Distribution system conditions
6) Storage tank conditions
7) Treatment process review, and
8) Source condition and sanitation

The Level I Assessment form can be viewed and downloaded at: http://www.healthy.arkansas.gov/programsServices/environmentalHealth/Engineering/Documents/Reports/FormsAndMaterials/Level_1_Assessment_Form.pdf

The requirements of the RTCR become effective on April 1, 2016. Currently, the Engineering Section is working with water systems to incorporate the RTCR requirements into their operations so that compliance will be assured when the effective date arrives.

If you have any questions regarding the requirements of the Revised Total Coliform Rule, please contact your district personnel or email Lance Jones at lance.jones@arkansas.gov

Inside the *Update*

EPA Releases Recommendations for Managing Cyanotoxins

Jeff Stone, P.E., Director

In June 2015, the Environmental Protection Agency released a guidance document titled "Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water" (Recommendations). This document represents an attempt by the Environmental Protection Agency (EPA) to provide guidance to public water systems in their efforts to cope with harmful algal blooms. It is important to understand that this document provides guidance regarding contaminants that are not currently regulated by the Safe Drinking Water Act. The contents of the Recommendations are not required by law nor by regulation.

A main point of the Recommendations is that each water utility that is vulnerable to harmful algal blooms should develop a Cyanotoxin Management Plan. It is recommended that components of such a plan include: evaluation of source vulnerability, observation of water source quality, analytical monitoring of water quality if blooms are observed, treatment adjustments if needed, coordination with stakeholders, and public communication if appropriate. The management plan should be an outline that details steps that will be taken by a utility, as needed, as well as details concerning coordination with other stakeholders.

The suggested monitoring components of the Recommendations are a mixture of qualitative evaluations and quantitative analysis. The process of determining if a water source is vulnerable may be based upon an understanding of the water quality characteristics of the source, nutrient levels, and whether or not harmful algal blooms are likely to be a seasonal issue with the source. Also, observation of the source water quality may rely upon regular visual observations with attention paid to water color as well as looking for blue green algae formation. Microscopic observation can be utilized to help determine the type of organisms that are present in the raw water. If justified, quantitative analysis capable of quantifying cyanotoxin concentrations can be conducted.

There are three analytical methods of significance for the purpose of analyzing water for the presence of microcystins. Test strips are available for use in the field and at water treatment plants. EPA has indicated that the detection limit for test strips is in the 0.5 to 1.0 ppb range. In a laboratory setting, an enzyme-linked immunosorbent assay (ELISA) method can be used. EPA has indicated that the detection limit for the laboratory ELISA method is approximately 0.3 ppb. A much more expensive analysis, for certain specific microcystins including microcystin-LR and cylindrospermopsin, can be performed using an HPLC-MS/MS method and EPA indicates the detection level of this method may be as low as 0.02 ppb. However, this more precise method is expensive ($500 per sample or more plus shipping costs) and relatively few labs are prepared to perform this analysis at this time.

The Recommendations also contain suggested trigger levels for issuing public communications and suggested language that can be used in those notifications. The trigger level concentrations used in the Recommendations are consistent with the recently issued EPA 10-day health advisories concerning cyanotoxins. (See related article in the Summer 2015 issue of this newsletter and the following table.)

EPA Health Advisory Concentrations

Cyanotoxin	Infants, Pre-school children	Adults
Microcystins	0.3 ug/L	1.6 ug/L
Cylindrospermopsin	0.7 ug/L	3 ug/L

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The Recommendations suggest that water systems base decision making regarding public communications upon the results of the ELISA method of analysis which provides a measure of total microcystins in a sample. However, the health advisory levels are apparently based upon the toxicity of microcystin-LR specifically and thus the health advisories inherently contain the assumption that all microcystin species are equally as toxic as microcystin-LR. In a letter critical of these recommendations, the American Water Works Association (AWWA) cited this assumption regarding toxicity as being unjustified and not based upon any scientific source (see next paragraph). A copy of the EPA Recommendations for Managing Cyanotoxins can be downloaded at the following internet address: http://www2.epa.gov/sites/production/files/2015-06/documents/cyanotoxin-management-drinking-water.pdf

Following the issuance of the Recommendations, AWWA issued a letter dated July 2, 2015 that was critical of the recently issued Recommendations. AWWA found fault with, among other things, the lack of stakeholder input into the Recommendations, shortcomings of available analytical methods, the way in which 10 day advisory concentrations were used to trigger public communication actions, an assumption that all microcystins are equally as toxic as microcystin-LR, and failure to consider other remedies that might be available to a drinking water utility. A copy of the July 2, 2015 letter from AWWA can be downloaded here: http://www.awwa.org/Portals/0/files/legreg/documents/CyanotoxinsRecommendations2015-07-02.pdf

The Arkansas Department of Health (ADH) intends to be supportive of public water systems in their efforts to respond appropriately to potential harmful algal blooms. Currently, the Arkansas Department of Health's Public Health Laboratory is pursuing efforts to have the capability to conduct total microcystin analysis using the ELISA method. While no routine monitoring is being planned at this time, this capability, once in place, will enable the Public Health Laboratory to provide a measure of finished water microcystin levels if requested.

It is important to note that not all surface water sources are likely to experience harmful algal blooms. Some surface water sources, that have higher flowrates (throughputs) or have lower nutrient loadings are less vulnerable to harmful algal blooms than sources that are more stagnant during warm summer periods and have higher nutrient loadings.

The ADH encourages water systems to evaluate the vulnerability of their source water with regards to possible harmful algal blooms. Evaluation of vulnerability may have to heavily rely on previous history of any observed blooms in the source water, the level of agricultural activity in the watershed, as well as historical water quality data.

Moving forward, water systems should practice diligence regarding observation of source water conditions. Visual cues that might trigger treatment changes and analytical monitoring may include: source water color changes, surface scum formation, microscopic identification of cyanobacteria, or shortened filter run times, as well as other cues. It is important to note that the greatest risk from cyanobacteria and related toxins occurs when significant growth of surface scum has occurred either near the intake site or when prevailing winds have concentrated these organisms near the intake site.

If a water system determines that it is vulnerable to harmful algal blooms, the system is encouraged to prepare a Cyanotoxin Management Plan as is suggested by the Recommendations. Elements of a plan should include details relating to methods and frequency of source water observations, treatment adjustments, analytical water quality monitoring, public communications, and coordination with stakeholders. Guidance for preparation of such a risk management plan is found in the Recommendations but also in a document prepared by the World Health Organization titled "Toxic Cyanobacteria in Water: A guide to their public health consequences, monitoring and management" found here http://www.who.int/water_sanitation_health/resourcesquality/toxcyanbegin.pdf

If a Cyanotoxin Management Plan is prepared, the ADH encourages water systems to submit their plan to the ADH for review, comment, and concurrence. This voluntary review process will serve to ensure that if a harmful algal bloom occurs, the water system and the ADH will be able to work together to minimize community exposure to cyanotoxins and ensure that public communication regarding risks be conducted in an effective and appropriate manner.

If you have any questions regarding cyanobacterial issues, please feel free to contact me at jeffery.stone@arkansas.gov.

Water Tank Inspections

Lance Jones, P.E., Chief Engineer

Water storage tanks are a vital component of a public water system. They serve many critical functions such as stabilizing water pressures, providing peak demand flows and maintaining supply during emergencies such as power outages and pump failures. Water storage tanks are also symbols of your community and a well-maintained tank displays the pride of your community. But more importantly, a well-maintained tank helps ensure that your system can reliably meet the user demands and deliver safe drinking water to consumers.

Proper maintenance of water storage tanks starts with regular inspections of the tank, including both external and internal conditions. These inspections should examine everything from the condition of the paint, to the integrity of the physical and structural components, to the sanitary features and conditions.

Water systems are requested to provide information regarding their water storage tank operations and inspections during each sanitary survey review. Water storage tanks shall be operated and maintained per AWWA Standard G200 for Distribution Systems Operation and Management. This standard calls for each system to have an inspection program to include procedures for routine, periodic and comprehensive inspections of water storage tanks. The Standard also requires each system to have a maintenance program for tanks which, includes cleaning and refurbishing based on the results of the inspections.

Full internal and external inspections of water storage tanks shall be conducted at a minimum of every 5 years in accordance with AWWA Manual M42 . Deteriorated coatings, missing vent screens, holes in the roof, water stagnation and other sanitary defects can degrade the quality of water inside the tank. When sanitary defects are found during an inspection, corrective measures shall be promptly taken to insure the quality of water is protected. Uncorrected sanitary defects are considered to be a Significant Deficiency.

When a Significant Deficiency is identified and issued, the water system is required to address and correct the deficiency in a timely manner or face treatment technique violations under the National Primary Drinking Water Regulations.

Failure to regularly inspect the condition of the water storage tank is considered a public health risk because the quality of the water in the tank cannot be verified. Therefore, failure to inspect and document the internal conditions of water storage tanks per AWWA G200 is considered a Significant Deficiency on the sanitary survey report.

Internal inspections can be conducted either dry or wet. Dry inspections are conducted after the tank is isolated and drained. If sanitary defects or other maintenance items are identified, they can often be corrected prior to placing the tank back into service. Wet, or underwater, inspections are conducted via a remote operated vehicle (ROV) or a diver. These inspections don't require the draining of the tank, but many identified sanitary defects and maintenance items can't be corrected without doing so.

Either inspection requires that AWWA C652 for Disinfection of Water-Storage Facilities be followed during and after the inspection. Special care should be taken when conducting underwater inspections to ensure that water quality is maintained and public health protection measures are taken during the inspection.

Often times, the underwater inspections are conducted without degrading the water quality. However, the water system shall be prepared to keep the tank isolated or issue a precautionary boil-order advisory if water quality degradation occurs or a significant sanitary defect is identified. The tank isolation or boil advisory shall remain in effect until the water quality issue is corrected and two consecutive sets of samples taken on different days show adequate disinfectant residual and absence of total coliforms.

Please contact your ADH District Staff if you have questions about water storage tank maintenance and inspections. The ADH Policy for Underwater Storage Tank Inspections is available on the Engineering Section website under the Reports, Forms & Policies tab.

http://www.healthy.arkansas.gov/eng

HARMFUL ALGAL BLOOMS:

When Being Green Isn't Such a Good Thing

Darcia Routh, P.G., Source Water Protection

EPA recently issued health advisories for cyanotoxins associated with so-called harmful algal blooms (HABs). The advisories include a list of harmful freshwater cyanotoxins produced by cyanobacteria (AKA "blue-green algae"), summaries of their known adverse health effects, and proposed drinking water concentration limits for both adults and children. EPA must also develop and submit a plan to Congress by Nov. 5 to evaluate harmful cyanotoxins risks to human health and to recommend feasible treatment options to mitigate any adverse public health effects. The recently enacted federal Drinking Water Protection Act gave EPA the responsibility to address HABs.

Both EPA and USGS have developed tools and resources to meet the goals of the Drinking Water Protection Act. Here are links to some helpful resources:

North American Lake Management Society quarterly newsletter, LakeLine, Vol. 32, Issue 2, Summer 2015, funded by US EPA: http://www.nalms.org/home/publications/lakeline-magazine/magazines.cmsx

EPA's HABs web tools and links to resources can be found here: http://www2.epa.gov/nutrientpollution/harmful-algal-blooms

A new publication from USGS, USGS Open-File Report 2015-1164 with full color illustrations, USGS Field and Laboratory Guide to Freshwater Cyanobacteria Harmful Algal Blooms…can be accessed at this link: http://www.usgs.gov/newsroom/article.asp?ID=4331#.VflwTJd9jww

Additionally, the ADH is developing testing protocols for cyanotoxins. Engineering AWOP staff is working with PWS and field testing Abraxis Microcystin Test Strips. The Abraxis Microcystins Strip Test is a rapid immunochromatographic test, designed solely for use in the qualitative screening of Microcystins and Nodularins in finished drinking water. A sample preparation prior to testing is not required to measure dissolved or free microcystins. The Abraxis Microcystins Strip Test provides only preliminary qualitative test results. If necessary, positive samples can be confirmed by ELISA, HPLC or other conventional methods. The sensitivity for the test ranges from 1 ppb to 5 ppb.

ADH's Public Health Lab is gearing up to perform quantitative testing for cyanotoxins—Microcystin and Cylindrospermopsin in finished drinking water—using the ELISA test process. Engineering and the lab will need to establish sampling protocols, sample preparation procedures—including lysing cells (destroying cell membranes), quality control criteria, calibration standards and controls, comprehensive SOPs, method detection and reporting limits, and a comprehensive data management strategy.

Prevention of cyanotoxin formation near lake intake structures begins with source water protection. Controlling nutrient pollution -- especially nitrogen and phosphorus -- in water bodies will reduce cyanotoxin-producing algal blooms like the one that shut down drinking water for more than 400,000 people in Toledo, Ohio, in August 2014.

At the local level, a public outreach effort to reduce nutrient load and pollution into drinking water watersheds is critical. Public outreach can be as complex as developing a full watershed-wide nutrient reduction strategy or as simple as including a 1/3 page flyer in water bills listing best management practices to reduce nutrient loading. Examples could be steps for septic system maintenance or proper use of lawn fertilizers and garden chemicals.

At the state-wide level, a stakeholder's technical advisory group recently formed. Reed Green, hydrologist with USGS and current president of the North American Lake Management Society and Tate Wentz with ADEQ, have gathered people from state and federal agencies—including ADH Engineering, US Army Corps of Engineers, AR Game & Fish Commission, AR Dept. of Natural Heritage, US Fish & Wildlife, Universities, Beaver Water District, Beaver Watershed Alliance, and Central AR Water. The HABs Workgroup will meet regularly (approximately every 6-8 weeks) at ADEQ headquarters in North Little Rock to form a plan of attack for state-wide assessment of risks to public health from cyanotoxins, development of sampling and testing protocols, and development of strategies to reduce nutrient pollution in watersheds.

If you would like web links, further information, or to be included in the HABs stakeholder workgroup, send Darcia Routh, Geologist Supervisor, Source Water Protection, an email at Darcia.routh@arkansas.gov or call her at 501-661-2623.

HARMFUL ALGAL BLOOM and MICROCYSTINS SAMPLING

Craig Corder, P.E., Engineer Supervisor

All public water systems (PWS) using surface water should do routine visual monitoring of the source water in the vicinity of the intake during summer and fall. The PWS should consider establishing a seasonal routine testing program if the PWS has a history of algae blooms.

- Visual testing is limited in that not all toxin producing algae will be visible and visual testing is also limited in that the presence of visible algae bloom does not necessary mean that a significant amount of toxin producing algae are present.

- Additional potential indicators of a harmful algae bloom include: increased taste / odor, increased pH, increased turbidity, decreased filter runs, increased coagulant demand, or increased chlorine demand.

When a PWS determines that there is or there may be a harmful algae bloom impacting or about to impact a drinking water intake, the PWS should contact the ADH Engineering Section regarding sampling by ADH and regarding optimizing treatment plant operations for the removal of algae and algae toxins.

The ADH Engineering Section has the ability to do field testing for microcystins using the Abraxis Strip Test. The ADH Laboratories have the ability to do testing for microcystins using the Abraxis ELISA method.

The Engineering Section has conducted a minimal amount of testing using the Abraxis test strips in an effort to become familiar with their use. Our limited experience has shown that the test strips can be utilized to confirm the presence or absence of cyanotoxins. It is envisioned that in the future the test strips may be utilized as a field test to determine if more precise laboratory analysis is warranted.

Source Water Protection Substantial Implementation Status and Source Water Assessment Program Update

Stephanie Burchfield, Source Water Environmental Health Specialist

We are pleased to announce the following community public water systems achieved the Substantial Implementation Milestone since April 2015:

Arkansas City Waterworks
Ash Flat Water Company
Prattsville Waterworks
Southeast Bradley County Water

Congratulations to these community public water systems on reaching the Substantial Implementation Milestone and for making the extra effort to protect their valuable drinking water sources.

New Source Water Assessment Program (SWAP) Reports are coming! We have been working closely with the USGS to enhance the Source Water Assessment Model for the past three years and are pleased to announce we will begin issuing SWAP Reports in the near future. New systems that have not had one of the original reports and systems that have added a new source(s) not included in the original report will be our first priority, followed by new and improved reports for all other systems. We appreciate your patience on this issue and look forward to producing updated reports so that our source water protection efforts can continue to remain strong.

REPORT OF THE

Arkansas Drinking Water Advisory and Operator Licensing Committee

The Arkansas Drinking Water Advisory and Operator Licensing Committee (Committee) held its quarterly meeting on July 9, 2015 in Lonoke, Arkansas. Committee members present were: Dr. Findlay Edwards, P.E., Committee Chair, University of Arkansas; Tim Shaw, Community Water System; Stacy Cheevers, Beaver Water District; Roger Moren, Sardis Water Association; Bradley Scheffler, City of Piggott; Aaron Benzing, P.E., Hawkins Weir Engineers. Jeff Stone, P.E., Executive Secretary, ADH was absent. Arkansas Department of Health (ADH) staff & guests present were Reginald Rogers, Deputy General Counsel, Lance Jones, P.E., Chief Engineer, Martin Nutt, Training and Certification Officer, and Ida Hampton, Administrative Specialist, ADH; Jeremy Rowe, Arkansas Environmental Training Academy (AETA); and Jeff Ford, Arkansas Rural Water Association (ARWA). .

In calling the meeting to order, Nutt explained Stone was unable to attend. He introduced new Committee Member Aaron Benzing, P.E., with Hawkins Weir Engineers. The Arkansas State Board of Health, appointed Benzing at its April 23, 2015 meeting, to serve on the Committee for a term of office extending through June 30, 2021.

The Committee confirmed Edwards as Chair from Chair-Elect. The Committee elected Shaw to Chair Elect. Edwards requested the Committee to review the provided minutes for the cancelled April 9, 2015 and January 6, 2015 Committee meetings. The Committee approved both meeting's minutes.

Old Business

Jones updated the Committee on the Engineering Section efforts to implement the SDWA Revised Total Coliform Rule (RTCR), which is effective April 2016. Jones stated the Section had made application for primary enforcement for the rule (Primacy) to EPA, received preliminary approval, and expects final approval after the comment period for the action closes tomorrow, July 10, 2015. He noted the Section was doing educational presentations at annual conferences, district meetings, and newsletter articles. Staff is also providing one-on-one training sessions with operators, as we unofficially require systems to meet the Rules main change from an MCL to requiring all coliform positive samples to have a Level 1 Assessment which requires assessing why the sample was positive and e-coli present samples requiring a greater depth Level 2 Assessment. The Section envisions when the RTCR is fully implemented the PWS will be responsible for Level 1 Assessments and the Section will perform Level 2 Assessments. Discussion followed as to lessons learned from the assessments performed. Jones shared types of failures being found and reviewed what would constitute a violation under the new rule, noting violations become Treatment Technique Violations, primarily due to failure of a PWS to respond to the assessment requirements or not taking identified corrective actions.

Nutt stated he and Scheffler attended the 2015 Association of Boards of Certification's Trainers Workshop and Annual Conference, January 12-16, 2015 in Long Beach, California. Nutt shared information he had gleaned about other states' passage rates on ABC exams, noting it was difficult to find apples to apples comparisons but in the couple of states he was able to identify, they had somewhat better passage rates of 30-40 percent on highest license grade levels. Cheevers asked if the ABC Professional Operator was discussed at the Conference with Nutt responding that presentations were provided and he felt the ABC PO licenses could help operators concerning reciprocity and some would like the professional designation.

New Business

The Committee reviewed the AWW&WEA Annual Report. Nutt informed the Committee the report was presented at the 2015 AWW&WEA Annual Conference in late April. The report's content was reviewed and he specifically discussed that the licenses held, renewed, and issued numbers were actually decreasing over the last three years. He hoped it was a reflection of technology and contract repairs allowing systems to do more with fewer staff and not systems allowing staff to perform licensable duties without a license.

Nutt requested a review of the USEPA Operator Certification Program Guidelines Compliance Report. He stated the report was required to demonstrate compliance with the EPA Certification Program Guidelines, which must be met to avoid a 20% holdback from the USEPA SRF Capitalization Grant. He noted the report demonstrated the Licensing Program was implementing the nine baseline standards. During discussion of the report, Moren read from the report that "modification in training courses may need to occur" and asked what

modifications? Nutt explained the statement was added to reflect changes being made in the mandatory training courses content to match the ABC Needs-To-Know exam criteria. Committee discussion focused on how the trainers were modifying the present courses in response to the recently implemented exams. Nutt thanked the Committee for their review.

Nutt provided the Committee an update for the 2015 License Renewal. He reviewed a statistical data sheet, noting that 3458 license renewals were mailed, noting a large number of operators hold two licenses, he stated approximately two-thirds of the operators had submitted renewals, with approximately 650 of those renewals still being processed, and approximately 100 presently identified as needing training research before declaring them short training hours. He concluded by noting this was a fairly typical renewal status at this mid-point in the renewal process.

Committee Reports

Jones provided the Section Director's Report. He reported the Engineering Section's budget remained relatively flat with EPA functioning on repeated continuing budget resolutions, service fees seeing little growth, and inflation more than consuming any increase in funds. He noted the Section has two summer engineering student interns doing sampling, and field calibration checks of surface systems' turbidimeters and pH meters. He announced that long-term employee Kyle Phillips had recently retired and the position changed to a sampling position to assist in the ever-increasing sampling requirements. He concluded by noting RTCR and harmful algae blooms were the issues getting the most attention.

Nutt in his License update reviewed the exam performance spreadsheet providing individual exam session performance and overall passage rate information. He noted the exams continue to see the lower license levels having decent passage rates with the rates trending lower as the license level increases and highlighted the troubling rates for the highest exam levels. He then provided an additional data sheet that looked at individual operator's rate of passage noting those rates were as much as 30 percent higher. He stated that he had noticed there were many operators who had taken the exam multiple times that were helping create the low overall passage rate. He stated the passage rates of individual operators were less troubling. Nutt then discussed the need to educate system and individual operators as to what level an exam brings the system compliance, the benefits of having an operator work through the lower license levels, and the need to study the actual manuals. Discussions also revolved around exam fees, were they appropriate, and were they a disincentive to bearing down to pass the exam. This fee discussion concluded with Shaw making a motion to pass a Committee resolution that the water operator licensing fees should be raised to the maximum levels allowed in the in the 1957 Licensing Law. Moren provided the second and without further discussion the resolution passed.

Nutt in his enforcement effort report provided a handout to the Committee detailing enforcement actions. Nutt explained that with the latest Disinfection-Disinfection By-Product Rule's required a "qualified operator" for all system serving water treated with a disinfectant. This meant all "no licensed operator violations" were now a SDWA violation not a state regulation violation. This change in violation type adds license violations into a system's overall SDWA compliance. If the system has other SDWA violations, it escalates the system's progression within the SDWA administrative penalty process. This explains why systems without a licensed operator may be progressing through the enforcement levels faster than they have in the past. He then reviewed the systems with compliance concerns and concluded by reviewing a list of systems on July 3, 2015 that did not have a licensed operator.

Nutt, in his General Program Update, informed the Committee the Program is very busy with 115 exams in the June round of exams sessions and the licensing renewal in full swing at the same time. He stated that all were progressing, but applications and exam results processing times were slower than usual. He concluded by reporting the exam registration has been going fairly well but still had a wrinkle or two in the June exams sessions.

Rowe noted that Randy Harper, AETA Director, was unable to attend, he was instructing a wastewater class due to the loss of their Wastewater Instructor, Jonathan Richardson. He announced that Kenny Harvey, from Shumaker Public Water Utility, was recently hired. Rowe provided the AETA's training report stating it provided attendance data for their training.

Ford provided the ARWA written quarterly training report and asked if there were any questions in reference to the report.

Other Business

The Committee confirmed next meeting date for October 8, 2015 and adjourned the meeting.

Operators Not Renewed 2015

(List as of September 21, 2015, does not include operators that requested not to renew.)

Licensee Name	City
Alexander Michael	West Helena
Allen Donald	Jacksonville
Allen Wayne	Rogers
Alquist Jerry	Sioux Falls
Anderson William	Dover
Anglin Lacy	Springdale
Armstrong Ira	Greers Ferry
Armstrong Mikey	Eureka
Babbitt Paul	Lonsdale
Bagley Terry	Gillham
Baker Christe	Foreman
Baker Donald	Harrison
Barnes Walter	Marshall
Bartholomew	West Fork
Bennett Rebecca	Springdale
Betts Wayne	Caddo Gap
Birchfield Dennis	El Dorado
Birtcher Brian	Mena
Boatright Ed	Lowell
Bowen Ronald	Jonesboro
Bowen Trevor	Bethel
Bradley Chris	Weiner
Branch Travis	Prairie Grove
Breedlove Billy	Harrison
Briggs Thomas	New Boston
Brown Bernard	Harrison
Brown Chris	Sheridan
Brown Donald	Fairview
Brown Freddie	Nashville
Bryant John	Searcy
Bryant Todd	Coal Hill
Buffer Larry	Gravette
Bundy Robert	Cabot
Burgess Todd	Greers Ferry
Buxton Robert	Mount Ida
Buzbee Jonathan	De Queen
Cain Russell	Walnut Ridge
Calloway Sharon	Pine Bluff
Carlson Paul	Mexico
Carter Lanny	Dardanelle
Chapman Wendell	Stuttgart
Cheek Julie	Sanford
Cheshier Joshua	Poteau
Childress Rachel	Crossett
Church Robert	Russellville
Clark James	Springdale

Licensee Name	City
Clarke Patrick	Eureka
Coffman Markham	Hardy
Copeland David	Blytheville
Corley Howard	Jacksonville
Cote Andre	Little Rock
Cowgill Jamey	Dolph
Crafton Nathan	Walnut Ridge
Crawford Donnie	El Dorado
Crisson Timothy	Humphrey
Davis Joey	Gosnell
Davis Roma	Hot Springs
Davis Tom	Cameron
Davis Tony	Scotland
Dean Harold	Van Buren
Devore Michele	Benton
Dewey J	Mountain
Dortch David	Paragould
Dossett Gary	Batesville
Douglas Kenneth	Colt
Doyle Joe	Bryant
Drew Thomas	Chisdester
Dungan Melodie	O Fallon
Dunn Samuel	Searcy
Duvall Lonnie	Russellville
Duwe Donald	Jacksonville
Eichelberger Nelda	Knoxville
Ellis Tony	Rosston
Farag Mark	Junction City
Farris Lee	Bella Vista
Faulk David	Prairie Grove
Ferguson Darryl	Russellvile
Ferguson Jeffrey	Texarkana
Findley David	Dardanelle
Finney Charles	Little Rock
Fisk Sonjia	Mulberry
Flanigan Jeff	Mena
Fletcher Timothy	Compton
Fowler Roy	Hot Springs
Francis Mary	El Dorado
Freeman Linda	Pelsor
French Robert	Clinton
Frenzel Arthur	Hot Springs
Fuller James	Mayflower
Gann Derrick	Cave City
Garner Gilbert	Abilene
Garner Ronald	Pangburn

Licensee Name	City
Gennings Aubrey	Doddridge
Giles James	Pyatt
Gill Eric	Watson
Goade Sam	Springdale
Golden William	Viola
Gorman William	Bella Vista
Gray Michael	Crossett
Green Brad	Rector
Green Gary	New Baine
Gregory Gilbert	Hardy
Gregory Ronnie	Fayetteville
Gross Arlis	Omaha
Grove Phillip	Cherokee
Guillory Gary	Sedalia
Haarmeyer Charles	De Queen
Hamilton Joe	Van Buren
Harmon Ann	White Hall
Harris Christopher	Marshall
Harrison Harold	Panama
Harrison Virginia	Leola
Harvey Randal	Russellville
Harvill Willie	Atkins
Hattabaugh Steven	Lowell
Hawk William	Cabot
Haynie James	El Dorado
Helmkamp Carrie	Springdale
Hendrix Matthew	Keiser
Hill Steve	Piggott
Hoffman Stephen	Malvern
Hoover Dennis	Little Rock
House Lucas	Mcgehee
Hovis Roger	Reyno
Howard Danny	Bella Vista
Hubbard Link	Cotton Plant
Immel Charles	Springdale
Jackson Cheryl	Cincinnati
Jackson John	Charlotte
Jackson Steve	Benton
Jenkins Thomas	Glenwood
Jennings Brandy	Omaha
Johnson Elizabeth	Winthrop
Johnson Floyd	El Dorado
Joiner Italino	Pine Bluff
Jones Carl	Hickory Ridge
Jones Chris	Imboden
Jones David	West Fork

Licensee Name	City
Jones Dustin	Ozark
Jones Joshua	Mountain
Junior Jeffrey	Benton
Jurgens David	Chesapeake
Kelley Arthur	N Little Rock
Kelley Casey	Hot Springs
King Brady	Bryant
Kirby Sy	Pea Ridge
Kraft John	Chidester
Laird Justin	Fayetteville
Lambert Keith	Waldo
Lanier George	Ashdown
Lanning George	Cotter
Lawrence Bobby	Springdale
Long John	Oil Trough
Loran Bro Eric	Subiaco
Luneau Joan	Sherwood
Lusinger Jesse	Pine Bluff
Maness Wesley	Hot Springs
Mann Ronny	Hot Springs
Martin David	Pea Ridge
Mcanelly Michael	Bald Knob
Mccreery Carrie	Queen City
Mcdonald Kenneth	Conway
Mcgill Fred	N Little Rock
Mcginister Terry	Helena
McKamie Marion	Saratoga
Mckinney Troy	Elaine
Mcnabb Robert	Batesville
Mcwhorter Donald	Star City
Melton Clarence	Doniphan
Meyer Dudley	Casa
Milam Sarah	Foreman
Millwee Marcus	Ft Towson
Mitchell Michael	Roland
Mitchell Tim	Winthrop
Montgomery James	Jonesboro
Moore Salenia	Mountain
Morris Kevin	Ravenden
Morrow John	Mountain
Nelson Marcus	Powhatan
Nevels Tracie	Foreman
Norbash Sid	Fayetteville
Northcross Fred	Huntsville
Novy Matthew	Mountain
Olivarez Gerardo	Ola
Omari Naeem	Gilmore

Licensee Name	City
O'neal Dennis	Coal Hill
Osborn James	Atkins
Osborn Melvin	Malvern
Owens Christopher	Fayetteville
Owens Jeremy	Hatfield
Owens Joe	Malvern
Peachee Dearl	Siloam
Perkins Victor	Hot Springs
Pierce Matthew	Barling
Pippin Kenneth	Garfield
Pittman Gary	Little Rock
Pitts Ronnie	Salem
Polk Larry	Sherwood
Preston Rae	Mountainburg
Pruitt Rex	Mountain
Pruitt Rod	Conway
Ragsdale Larry	Black Rock
Ray Erik	Rogers
Reimers Ty	Gaylord
Renken Carl	Ulm
Rhyne Shane	West
Rice Robin	Texarkana
Riddling Phillip	Lonoke
Riel Daniel	Mansfield
Riley Don	Cushman
Riley Mikeshell	Pine Bluff
Risher David	El Dorado
Roberts Mary	North Little
Roe Billy	Redfield
Roughton Dustin	Bella Vista
Rowton Morgan	Altamonte
Ruple Donald	Pocahontas
Russell Chad	Arkadelphia
Ryder Charlie	Thornton
Sanders Terry	Heber Springs
Sandy Kevin	Fort Smith
Schortzmann	Chowchilla
Scott Johnny	Booneville
Short Teddy	Hot Springs
Showl Peter	Chester
Simpson Samantha	Pine Bluff
Smith Alice	El Dorado
Smith Gary	Van Buren
Smith Jackie	Mansfield
Smith Mark	Benton
Smith Ricky	Colcord
Stafford Louis	Blytheville

Licensee Name	City
Stahlman Charles	Bull Shoals
Stallings A	Greenwood
Stanberry Jeffrey	Camden
Stauffer John	Bull Shoals
Stem Larry	Van Buren
Stepp Ben	Lamar
Still Russell	Bull Shoals
Stracner Ronald	Augusta
Stutts James	Wynne
Sweeden Robbie	Atkins
Swofford Grady	Hampton
Tate Cameron	Lake City
Taylor Raymond	Lonsdale
Tedford Vernon	Hot Springs
Templeman Ricky	Boles
Terry Case	Danville
Thaxton Charles	Mountain Ida
Thomas Wesley	Greenwood
Thompson Danny	Atkins
Tighe Lori	New Boston
Townsend Sue	Fouke
Tracy Forrest	Texarkana
Tracy Matthew	Perryville
Trotter Rickey	Shannon Hills
Tyler Billy	Rogers
Tyler Odis	Texarkana
Tyra Lee	Danville
Underwood Dallas	Batesville
Vanaman Charles	Pea Ridge
Vondran John	Conway
Wagoner Kirk	Cave City
Walker Jeremy	Alma
Walther Zeno	Fort Smith
Ward Carroll	Lowell
Weaver Eric	Oxford
Whiseant Glenn	Taylor
White Terry	Benton
Whitman Lee	Bull Shoals
Whitworth Brian	Carlisle
Widener Wendy	Bentonville
Wiley Robert	Dover
Wilkerson Michael	Hermitage
Williams Ben	Okolona
Williams Fitzgerald	North Little
Williamson Gary	Montrose
Wilms Larry	Bella Vista
Winn Eddie	Salado

Licensee Name	City
Wood Clyde	Lincoln
Wright William	El Dorado

Renewals Withheld – Inadequate Training Documented

Allen Robert	Summit
Ashcraft Teresa	Pine Bluff
Brown Steve	Kensett
Burnett Debbie	Crossett
Carney Joshua	Pea Ridge
Chapman Wendell	Stuttgart
Croy Charles	Redfield
Dunn James	Conway
England Kendell	Lincoln
Foster Jonathan	Mansfield
Greer William	Earle
Hadlock Robert	Clarksville
Hilliard Gary	Nashville
Jones Bobby	Mount Ida
Littleton Michael	Pine Bluff
McFadden Fred	Little Rock
Moore William	Mtn View
Palmquist Randy	Maumelle
Patton Robert	Clarksville
Sandifer Donald	Greenwood
Shaddon Kyle	Russellville
Shelley James	Jacksonville
Smith Donny	Alexander
St John Michael	Batesville
St John Natalie	Batesville
Stewart Bradley	Springfield
Tate Ezzi	Sherwood
Testerman Jeff	Rudy
Thorton Rob	Hermitage
Tighe Lori	New Boston
Vorwerk Richard	Dover
Waldrop Larry	New Edinburg
Warford Danny	Fayetteville
Weickersheimer B	Bentonville
Wilson John	Knoxville

2015 Water License Renewal Update

The 2015 License Renewal process is in its final stages. All renewals received have been processed and either renewal wallet cards issued or renewal withheld notices provided.

If you have not submitted your renewal remember you must have 24 contact hours of approved training, and at least 12 of the hours must be approved as direct water operator training. The other 12 can be more direct or indirect training. Considerable training attendance may be documented at: https://health.arkansas.gov/wa_engTraining/hours.aspx

If you are short renewal hours, the Regulations allow hours to be obtained until June 30, 2016, to meet the 2015 renewal requirements. Licenses not reinstated by June 30, 2016 are lost. Training schedules are on the internet at: http://www.healthy.arkansas.gov/eng/autoupdates/oper/opcertlinks.htm

It is the operator's responsibility to see that their license is renewed regardless of the receipt of a renewal invoice, the renewal being processed by their utility, or receipt of the renewal documents by the license program. The operator needs to verify their license renewal by watching for the receipt of their renewal wallet card, with a June 30, 2017 expiration date.

Staff News:

Shanté Ross joins the Engineering Section as the new Administrative Assistant II. Shanté previously worked at Integrity as an administrative assistant and at Kids First as a Developmental Tech. Shanté plans to graduate in December with a degree in Psychology from the University of Phoenix.

RTCR Small System Guidance

EPA has announced the release of "The Revised Total Coliform Rule: A Guide For Small Public Water Systems". The guide provides small public water systems, specifically those serving 1,000 or fewer persons, with guidance on complying with the requirements of the Revised Total Colifrom Rule.

The guidance document will be made available at the following address http://www.healthy.arkansas.gov/programsServices/environmentalHealth/Engineering/Pages/ReportsandForms.aspx

Water Operator Licenses Issued
June 1, 2015 through August 31, 2015

BARNES VICTOR	D - II	COMMUNITY WATER SYSTEM
BAUGH BRADLEY	D - I & T - I	ARSENAL WATER SYSTEM
BOWDEN LANCE	D - III	ATKINS WATER SYSTEM
BRANSCUM TYLER	D - II	COMMUNITY WATER SYSTEM
CAMPBELL MARK	D - IV & T - IV	CENTRAL ARKANSAS WATER
DAVIS KENNETH	D - II	YORKTOWN WATER ASSOCIATION
DOBBINS TODD	D - IV	CENTRAL ARKANSAS WATER
DOBBINS TODD	T - IV	CENTRAL ARKANSAS WATER
FARRIER CHARLES	D - IV	BATESVILLE WATER UTILITIES &
FITZGERALD PATRICK	T - II	DUMAS WATERWORKS
FLANNERY JAMES	D - I	ADC - CUMMINS UNIT MAINT
HACKWORTH MICHAEL	D - I & T - I	REYNO WATERWORKS &
HALE GREGORY	D - IV	SEARCY WATERWORKS
HAVENS CHARLES	D - III	WOOSTER WATERWORKS
HIGGINS JOHN	D - I	BRUNNER HILL WATER ASSOC
HOBBS ASHLEY	D - IV	ARKANSAS DEPARTMENT OF HEALTH
HOLT CHARLES	D - IV	ARKANSAS DEPARTMENT OF HEALTH
HUTCHISON WALTER	D - I	EL DORADO WATERWORKS
JEFFERY RICHARD	D - IV	BATESVILLE WATER UTILITIES &
JONES JESSIE	D - III	RIVERSOUTH RURAL WATER DIST
KRIEGER ADAM	T - II	COMMUNITY WATER SYSTEM
LONG TERRY	D - II	EUREKA SPRINGS WATERWORKS
LOVE KEVIN	D - IV	BASSETT WATERWORKS,
MARTIN EDWIN	D - I	BULL SHOALS WATER SYSTEM
MARTIN GARY	D - I	LAWRENCE CO REG WATER DIST
MASHBURN CHRISTOPHER	D - III	BENTONVILLE WATER UTILITIES
MIKELONIS DANA	D - I	WALKER CREEK STATELINE RWA
MORRIS JASON	D - I	NASHVILLE WATERWORKS
ORRICK JEFFREY	D - I & T - I	LAWRENCE CO REG WATER DIST
PARKER ROBERT	D - IV	SMACKOVER WATERWORKS
PATE JOHN	D - I	LEPANTO WATERWORKS
PETERSON ADAM	D - IV	ROGERS WATER UTILITIES
PIERCE MARK	T - I	WYNNE WATERWORKS
POLK GREGORY	D - I	BEEBE WATERWORKS
RICHARDSON JOHN	T - II	ROCK MOORE WATER AUTHORITY
ROWE JEREMY	T - IV	AR ENVIRONMENTAL TRAINING
SCHLINKER JOHN	T - I	BOONEVILLE WATERWORKS
SOTTILARO CHRIS	D - I	S P G WATER ASSOCIATION
SOTTILARO NIKOLAS	D - I	S P G WATER ASSOCIATION
STUART MICHAEL	D - IV	HEBER SPRINGS WATER SYSTEM
TERRY JASON	D – IV & T - III	WALDO WATERWORKS &
VARNER GARY	D - I	HOLIDAY ISLAND WATERWORKS
VAUGHN ASHLEY	T - I	CORNING WATERWORKS
WALKER MATTHEW	D - III	FAYETTEVILLE WATERWORKS
WALKER MICAH	D - I	OXFORD WATERWORKS

Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems, April -June, 2015

ADC TUCKER MAINT	BMCL 5
ADC TUCKER MAINT	DBPR 5, 6
ADC EAST ARKANSAS REG.	BMCL 4
ALMA WATERWORKS	TMCL 5
ALMYRA WATERWORKS	Bmon 6
ALPENA WATERWORKS	Bmon 5
ALTHEIMER WATERWORKS	BMCL 6
ALTUS WATERWORKS	Bmon 5
ASP MT MAGAZINE	DBPR 4, 5, 6
ASP MT MAGAZINE	BMCL 5
BAXTER-MARION RWA	BMCL 6
BEE BRANCH WATER	Bmon 4
BEN LOMOND WATERWORKS	Bmon 5
BLUE MOUNTAIN	DBPR 4, 5, 6
BODCAW RURAL WATER	DBPR 4, 5, 6
BOYDELL WATER ASSOC	BMCL 6
BRINKLEY WATERWORKS	DBPR 4, 5, 6
BUENA VISTA-OGEMAW WA	DBPR 4, 5, 6
CALHOUN COUNTY WA	PN 4
CHICOT JUNCTION WA	DBPR 4, 5, 6
CHICOT JUNCTION WA	BMCL 4
COMPTON WATERWORKS	BMCL 6
CONCORD WATER & SEWER	PN 6
CONWAY CO REG WATER	BMCL 6
COTTON PLANT	PN 4, BMCL5
COY WATERWORKS	Bmon 5
COY WATERWORKS	OperLic 5
CRESTWOOD MHP	Bmon 4
DEER RUN WATER COMPANY	PN 4
DEER RUN WATER COMPANY	OperLic 5, 6
DYER WATERWORKS	Bmon 6
EAST MONROE CO WU	DBPR 4, 5, 6
FOUKE WATERWORKS	Bmon 4, 5
FREEDOM WATER ASSOC	Bmon 6
FRENCHPORT WATER ASSOC	Bmon 5
GASSVILLE WATERWORKS	Bmon 5
GILLHAM REGIONAL WD	Bmon 6
GILLHAM WATERWORKS	Bmon 4, 5
GILLHAM WATERWORKS	OperLic 5
GREAT LAKES CHEM. SOUTH	BMCL 6
GREEN FOREST	BMCL 6
GUY WATERWORKS	Bmon 5
HACKETT WATERWORKS	DBPR 4, 5, 6
HAMBURG WATERWORKS	Bmon 6
HARMONY GROVE	DBPR 4, 5, 6
HARTFORD WATERWORKS	Oper Lic 4, 5, 6
HARTFORD WATERWORKS	PN 5, 6
HOUSTON WATERWORKS	PN 4, 5
HUTTIG WATERWORKS	BMCL 6
HWY 4 24 WATER ASSOC	DBPR 4, 5, 6
INDIAN SWITCH WATER	DBPR5,BMCL5
JOHNSON TWP WATER ASSOC	PN 4
KELSO-ROHWER WATER	PN 6
LAKE CHICOT WATER ASSOC	DBPR 4, 5, 6
LAKE CITY WATERWORKS	GWR 5,Bmon6
LAMAR WATERWORKS	BMCL 6
LEISURE HILLS MHP	BMCL 6
LITTLE RIVER CO RDA	DBPR 4, 5, 6
LITTLE RIVER CO RDA	Bmon 6
MAMMOTH SPRINGS	Bmon 5
MARYSVILLE WATER ASSOC	BMCL 4
MILLER COUNTY PWA	Bmon 4, 5, 6
MILLTOWN-WASHBURN WU	DBPR 4, 5, 6
MONTGOMERY CO REG PWA	DBPR 4, 5, 6
MONTROSE WATERWORKS	DBPR 4, 5, 6
MONTROSE WATERWORKS	BMCL 6
MORNING STAR WATER	Bmon 6
MOUNT IDA WATERWORKS	DBPR 4, 5, 6
MUNDELL HEIGHTS	BMCL 6
NEW LONDON WATERWORKS	PN 6
NORTH CARBON CITY WA	Bmon 4, 5
NORTH EAST PUBLIC WA	BMCL 6
PANGBURN WATERWORKS	Bmon 6
PARKDALE WATERWORKS	PN 6
PARON-OWENSVILLE WA	DBPR 4, 5, 6
PERLA WATER ASSOCIATION	BMCL 4
PIKE CITY WATER ASSOC	Bmon 6
RAMBO WATER DISTRICT #1	BMCL 5
RAVENDEN SPRINGS	BMCL 6
ROSSTON WATERWORKS	Bmon 6
SDM WATER ASSOCIATION	Bmon 6
SEBASTIAN LAKE PWA	Bmon 6
SOUTH LOGAN CO WATER	BMCL 6
SOUTHWEST ARKANSAS WS	DBPR 4, 5, 6
ST FRANCIS RIVER REG	BMCL 5
STAR CITY WATERWORKS	BMCL 5
STRAWBERRY WATERWORKS	BMCL 4,Bmon5
SYLAMORE VALLEY WATER A	Bmon 4
TALL OAKS MHP	Bmon 6
TOLLETTE WATER	GWR 5, BMCL5
TRI-COUNTY WATER DD	DBPR 4, 5, 6
VILONIA WATERWORKS	BMCL 4
WABBESEKA WATERWORKS	Bmon 5

WALDRON WATERWORKS	Bmon 4
WALKER WATER ASSOC	BMCL 4
WALKERVILLE WATER ASSOC	Bmon 6
WALNUT HILL WATER ASSOC	BMCL 6
WARD MHP	GWR4,BMCL6
WARD MHP	Bmon 4, 5
WARD MHP	DBPR 5
WATSON WATERWORKS	PN 5
WEINER WATERWORKS	BMCL 6
WHEATLEY WATERWORKS	DBPR 4, 5, 6
WIEDERKEHR VILLAGE	PN 6
WILLISVILLE WATERWORKS	OperLic4,PN5,6
WINCHESTER WATERWORKS	BMCL 6
WINSLOW WATERWORKS	Bmon 5
WINTHROP WATER ASSOC	BMCL5,Bmon6

KEY: Bmon = Bacti Monitoring; BMCL = Bacti MCL; CCR = Consumer Confidence Rule; Dmon = Disinfection By Product Rule Monitoring; DBPR=Disinfection By Product Rule MCL or Treatment Technique; GWRMCL=GWR Treatment Technique; GWRmon= GWR Monitoring or Reporting; PN = Public Notice Rule Tmon = SWTR Major Monitoring; TMCL = SWTR Treatment Technique; SWTR= Various SWTR requirements; Failure to Filter; RMCL = Radiochemical MCL; FMCL = Fluoride MCL; IMCL=Inorganic Chemical MCL; SMCL = Synthetic Chemical MCL; OperLic = Operator Licensing; 4 = April 2015, 5 = MAy 2015, 6 = June 2015

Mandatory Training Course Schedule

Most Current Listing is at: www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm.
Please contact the course sponsor to register for course well in advance of course date.

WATER LICENSE EXAM SESSION **NOT HELD** END OF MOST COURSES.

(Please note all mandatory courses begin at 8:00 a.m.)

Mandatory Course Name	Start Date	Ending Date	Time	CITY	LOCATION	SPONSOR
Intermediate Water Treatment	10/01/15	10/15/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Advanced Water Treatment	10/06/15	10/08/15	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Treatment	10/06/15	10/08/15	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Advanced Water Distribution	10/13/15	10/15/15	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	AETA
Intermediate Water Distribution	10/16/15	10/30/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Basic Water Math	10/20/15	10/20/15	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Applied Water Math	10/21/15	10/21/15	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
ADH PWS Compliance	10/22/15	10/22/15	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	ADH
Advanced Water Treatment	11/02/15	11/15/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Basic Water Distribution	11/03/15	11/05/15	8:00 AM	Camden	AR Env Training Academy, 100 Carr Road	AETA
Intermediate Water Treatment	11/10/15	11/12/15	8:00 AM	Maumelle	Wastewater Plant Training Rm, 425 B Hyman Drive	AETA
Advanced Water Distribution	11/16/15	11/30/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Advanced Distribution	11/17/15	11/19/15	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Treatment	11/17/15	11/19/15	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Applied Water Math	12/01/15	12/15/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Basic Water Math	12/01/15	12/15/15	TBD	Internet	http://www.sautech.edu/aeta/schedule.aspx	AETA
Basic Water Math	12/01/15	12/01/15	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Applied Water Math	12/02/15	12/02/15	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
ADH PWS Compliance	12/03/15	12/03/15	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	ADH
Intermediate Water Distribution	12/08/15	12/10/15	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Advanced Water Treatment	12/15/15	12/17/15	8:00 AM	Camden	AR Env Training Academy, 100 Carr Road	AETA
Basic Water Math	12/15/15	12/15/15	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
ADH PWS Compliance	12/16/15	12/16/15	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Applied Water Math	12/17/15	12/17/15	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
The 2016 Mandatory Training schedule should be available at the below noted website.						

The most current Mandatory Training Schedule with location information is available at
http://www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm

WATER OPERATOR LICENSE EXAMINATIONS SCHEDULE

The most current Exam Schedule is at: http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm

You must register for the exam 45 days in advance. To register on the internet go to www.healthy.arkansas.gov/eng and click on Operator Certification, then select Register- Water License Exam. To register by e-mail provide name, license exam desired, exam session site, and exam date in an email addressed to ADH.Water.Licensing@arkansas.gov. You may register by phone with the Water Licensing Program at (501) 661-2623.Call (501) 661-2623, ask for Water Licensing Program.

Listed below are the dates and locations of examination sessions as scheduled, as of **October 1, 2015**. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Drivers License or equivalent) will be required to sit for an Exam. Cell phones, pagers and other electronic communication devices are not allowed. Non-Programmable calculators are allowed in exam sessions.

EXAM DATE	REGISTER DEADLINE	CITY	LOCATION	TIME
12/4/2015	10/20/15	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
12/4/2015	10/20/15	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
12/4/2015	10/20/15	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
12/11/2015	10/27/15	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
12/11/2015	10/27/15	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
12/11/2015	10/27/15	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM
3/4/2016	1/19/16	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
3/4/2016	1/19/16	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
3/4/2016	1/19/16	Mtn. Home	Baxter Co OEM Training Facility, 170 Dillard Dr,	9:00 AM
3/11/2016	1/26/16	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
3/11/2016	1/26/16	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
3/11/2016	1/26/16	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM
The 2016 License Exam schedule should be available at the below noted website.				

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. Also, the latest exam schedule information can be viewed on the Internet at: < http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm >.

Remember, you must register for the exam 45 days in advance. Application for License is not registration for an exam

Please verify that your license application has been filed with this office and that the required exam fee for each exam has been paid Credit for the mandatory Certification Training Courses must be obtained before taking an exam. Copies of your training documentation must be provided when registering for an exam or provide documentation of its attendance by the exam session.

Free Water License Exam Manuals

Systems eligible for manuals are all Community Public Water Systems or Non-Community Non-Transient Public Water Systems serving a retail population of fewer than 3300 persons. The manuals, see table below, are provided to the water system, not the individual operator.

A simple request to Water Operator Licensing Program by phone at (501) 661-2623 or email at ADH.Water.Licensing@arkansas.gov is all that is required to receive the manuals.

Reference Manuals Provided OpCert Grant Eligible Systems	***Value***
*Water Treatment Plant Operation, Volume I, by CSU Sacramento**	*$49.00*
*Water Treatment Plant Operation, Volume II, by CSU Sacramento**	*$49.00*
Water Distribution System Operation & Maintenance, by CSU Sacramento	*$49.00*
Small Water System Operation and Maintenance, by CSU Sacramento	*$49.00*
Manage For Success, by CSU Sacramento	*$49.00*
Utility Management, by CSU Sacramento	*$29.00*
Water System Security: A Field Guide by American Water Works Assn	*$65.00*
Operator Certification Study Guide by American Water Works Association	*$59.00*
Total Value of Set	*$398.00*

** Manual provided if system is required to have treatment-licensed operators.*

ENGINEERING SECTION
ARKANSAS DEPARTMENT OF HEALTH
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LITTLE ROCK, AR 72205-3867
(501) 661-2623
www.HealthyArkansas.com/eng/

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AWW&WEA District Meetings

See also the Division's web site www.healthyarkansas.com/eng/ for updates.

DATE	TIME	CITY	LOCATION	SPONSOR
November 2015				
5	5:30 PM	Fort Smith	Golden Corral	Western District, AWW&WEA
5	5:00 PM	TBA	TBA	Central District, AWW&WEA
12	5:00 PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
12	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
12	5:30 PM	Caldwell	Catfish Island	Eastern District, AWW&WEA
17	5:00 PM	Crossett	Fiesta Linda	Southeast District, AWW&WEA
18	8:30 AM	Berryville	Community Center	Northwest District, AWW&WEA
19	12:30 PM	Jonesboro	Ron's Catfish	Northeast District, AWW& WEA
19	6:00 PM	Hope	UACC	Southwest District, AWW&WEA
December 2015				
3	5:00 PM	TBA	TBA	Central District, AWW&WEA
3	5:30 PM	Fort Smith	Columbus Acres Picnic	Western District, AWW&WEA
9	8:30 AM	Fayetteville	Chancellor Hotel	Northwest District, AWW&WEA
11	5:30 PM	Brinkley	Civic Center	Eastern Central District, AWW&WEA
10	5:30 PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
10	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
15	5:00 PM	Monticello	Q&Y House	Southeast District, AWW&WEA
17	12:30 PM	Jonesboro	Wild Hog BBQ	Northeast District, AWW&WEA
Does not Meet				Southwest District, AWW&WEA
January 2016				
7	5:00 PM	TBA	TBA	Central District, AWW&WEA
7	5:30 PM	Fort Smith	Golden Corral	Western District, AWW&WEA
13	8:30 AM	Bella Vista	Riordan Hall	Northwest District, AWW&WEA
14	8:30 AM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
14	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
TBA	5:30 PM	TBA		Eastern District, AWW&WEA
20	5:00 PM	Monticello	Western Sizzlin	Southeast District, AWW&WEA
21	12:30 PM	Paragould	Grecian Steakhouse	Northeast District, AWW&WEA
TBA	6:00 PM	Texarkana		Southwest District, AWW&WEA